Docket No. 0756-1915 Application Serial No. 09/233,145

a second contact hole through said leveling film and said insulating film; and a pixel electrode formed over said leveled upper surface and directly connected to said semiconductor film through said second contact hole,

wherein an edge of said leveling film at a periphery of said second contact hole is rounded.

57. (Amended) A display device comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film complising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film comprising an inorganic material formed over said gate electrode;

a wiring formed on said insulating film and electrically connected to said semiconductor film through a contact hole formed in said insulating film;

a leveling film comprising an organic resin provided over said semiconductor film, said insulating film and said wiring;

an opening through said leveling film and said insulating film; and a pixel electrode formed over said leveling film and directly connected to said semiconductor film through said opening,

wherein a diameter of said opening is larger at an uppermost surface of said leveling film than at a lowermost surface thereof.

58. (Amended) A display device comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film comprising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film over said gate electrode, said insulating film comprising an inorganic material;

a leveling film comprising an organic resin formed over said insulating film; and

a pixel electrode formed over said leveling film and directly connected to said semiconductor film through an opening provided in said leveling film,

wherein an edge of said organic resin film at a periphery of said opening is rounded.

59. (Amended) A display device comprising:

a plurality of thin film transistors formed over a substrate, each of said thin film transistors comprising at least a semiconductor film and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film formed over said gate electrode, said insulating film comprising an inorganic material;

a first opening formed in said insulating film over said semiconductor film;

a leveling layer formed over said insulating film to provide a leveled upper surface, wherein said leveling layer comprises an organic resin and is prevented from directly contacting said semiconductor film by said insulating film;

a second opening through said leveling layer and said insulating film over said semiconductor film; and

a pixel electrode formed over said leveled upper surface, said pixel electrode being directly connected to said semiconductor film through said second opening.

60. (Amended) A display device comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film comprising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film comprising an inorganic material formed over said gate electrode;

a first contact hole formed in said insulating film;

a wiring formed on said insulating film and electrically connected to said semiconductor film through said first contact hole formed in said insulating film;

a leveling film comprising an organic resin to provide a leveled upper surface over said insulating film;





a second contact hole through said leveling film and said insulating film; and a pixel electrode formed over said leveled upper surface and directly contacting said semiconductor film through said second contact hole.

61. (Amended) A television having a display unit and a tuner for receiving television radio wave, said display unit comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film comprising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film comprising an inorganic material formed over said gate electrode;

a first contact hole in said insulating film;

a wiring formed on said insulating film and electrically connected to said semiconductor film through said first contact hole formed in said insulating film;

a leveling film comprising an organic resin to provide a leveled upper surface over said insulating film;

a second contact hole through said leveling film and said insulating film; and a pixel electrode formed over said leveled upper surface and directly connected to said semiconductor film through said second contact hole,

wherein an edge of said leveling film at a periphery of said second contact hole is rounded.

62. (Amended) A television having a display unit and a tuner for receiving television radio wave, said display unit comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film comprising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film comprising an inorganic material formed over said gate electrode;

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a wiring formed on said insulating film and electrically connected to said semiconductor film through a contact hole formed in said insulating film;

a leveling film comprising an organic resin provided over said semiconductor film, said insulating film and said witing;

an opening through said leveling film and said insulating film; and a pixel electrode formed over said leveling film and directly connected to said semiconductor film through said opening,

wherein a diameter of said opening is larger at an uppermost surface of said leveling film than at a lowermost surface thereof.

63. (Amended) A television having a display unit and a tuner for receiving television radio wave, said display unit comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film compfising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween:

an insulating film over said gate electrode, said insulating film comprising an inorganic material;

a leveling/film comprising an organic resin formed over said insulating film; and a pixel electrode formed over said leveling film and directly connected to said semiconductor film through an opening provided in said leveling film,

wherein an edge of said organic resin film at a periphery of said opening is rounded.

64. (Amended) A television having a display unit and a tuner for receiving television radio wave, said display unit comprising:

a plurality of thin film transistors formed over a substrate, each of said thin film transistors comprising at least a semiconductor film and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween;

an insulating film formed over said gate electrode, said insulating film comprising an inorganic material;

a first opening formed in said insulating film over said semiconductor film;

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a leveling layer formed over said insulating film to provide a leveled upper surface, wherein said leveling layer comprises an organic resin and is prevented from directly contacting said semiconductor film by said insulating film;

a second opening through said leveling layer and said insulating film over said semiconductor film; and

a pixel electrode formed over said leveled upper surface, said pixel electrode being directly connected to said semiconductor film through said second opening.

65. (Amended) A television having a display unit and a tuner for receiving television radio wave, said display unit comprising:

at least one thin film transistor formed over a substrate, said thin film transistor having a semiconductor film comprising silicon as an active layer thereof and a gate electrode adjacent to said semiconductor film with a gate insulating film interposed therebetween:

an insulating film comprising an inorganic material formed over said gate electrode;

a first contact hole formed in said insulating film;

a wiring formed on said insulating film and electrically connected to said semiconductor film through said first contact hole formed in said insulating film;

a leveling film comprising an organic resin to provide a leveled upper surface over said insulating film;

a second opening through said leveling film and said insulating film; and a pixel electrode formed over said leveled upper surface and directly contacting said semiconductor film through said second opening.